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(54) Title: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL VIRAL REGULATORY GENES AND USES THEREOF

(57) Abstract: The present invention relates to a first group of novel genes, here identified as genomic address messenger or VGAM genes, and a second group of novel operon-like genes, here identified as viral genomic record or VGR genes. VGAM genes selectively inhibit translation of known 'target' genes, many of which are known to be involved in various diseases. Nucleic acid molecules are provided respectively encoding 1560 VGAM genes, and 205 VGR genes, as are vectors and probes both comprising the nucleic acid molecules, and methods and systems for detecting VGAM and VGR genes and specific functions and utilities thereof, for detecting expression of VGAM and VGR genes, and for selectively enhancing and selectively inhibiting translation of the respective target genes thereof.

INTERNATIONAL SEARCH REPORT

International application No. PCT/IL03/00998

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01N 33/48
US CL : 702/19

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

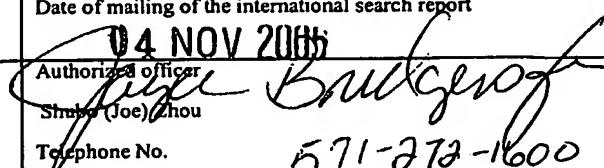
Minimum documentation searched (classification system followed by classification symbols)
U.S. : 702/19

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JACQUE et al. Modulation of HIV-1 replication by RNA interference. Nature. 25 July 2002, Vol. 418, pages 435/438, see entire document.	1-20
A	GITLIN et al. Short interfering RNA confers intracellular antiviral immunity in human cells. Nature. 25 July 2002, Vol. 418, pages 430-435.	1-20
A	XU et al. The Drosophila MicroRNA Mir-14 Suppresses Cell Death and Is Required for Normal Fat Metabolism. Current Biology. 29 April 2003, Vol. 13, pages 790-795.	1-20
A	OMOTO et al. HIV-1 nef suppression by virally encoded microRNA. Retrovirology. December 2004, Vol. 1, pages 44-55.	1-20
A	LU et al. Adenovirus VA1 Noncoding RNA Can Inhibit Small Interfering RNA and MicroRNA Biogenesis. Journal Virology. December 2004, Vol. 78, No. 23, pages 12868-12876.	1-20
A	AMBROS, V. microRNAs: Tiny Regulators with Great Potential. Cell. 28 December 2001, Vol. 107, pages 823-826.	1-20
A	LIM et al. Microarray analysis shows that some microRNAs downregulate large numbers of target mRNAs. Nature February 2005, Vol. 433, pages 769-773.	1-20

<input type="checkbox"/>	Further documents are listed in the continuation of Box C.	<input type="checkbox"/>	See patent family annex.
*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O"	document referring to an oral disclosure, use, exhibition or other means		
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INTERNATIONAL SEARCH REPORT

PCT/IL03/00998

Continuation of B. FIELDS SEARCHED Item 3:
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